Columbia and Snake River Temperature Challenges – Summary of 9/25-26 Meeting and Action Plan

The Corps of Engineers (Corps), Bureau of Reclamation (Reclamation), and Environmental Protection Agency (EPA) met in Portland on September 25-26, 2007 to discuss challenges each agency faces related to water temperature in the Columbia and Snake Rivers.

For context and background, these two major rivers are listed by the states of Idaho, Oregon, and Washington as 'impaired' for temperature under Section 303 of the Clean Water Act. With those formal impairment listings comes the obligation to develop plans to bring the rivers into compliance with the approved state and tribal water temperature standards. Although the Clean Water Act places this obligation on the individual states, each of the three states has asked EPA to take on the responsibility for developing the appropriate temperature attainment plan. Specifically, Oregon and Washington asked EPA to develop the TMDL; Idaho asked EPA to do the modeling but intended to develop its own TMDL for Idaho waters. The states argue that the Columbia River and the Snake River are subject to the standards of two or three states, and one or more tribes, and thus it makes sense for EPA to take on this responsibility. EPA has agreed.

EPA Region 10 developed a preliminary draft TMDL in November 2002. This preliminary draft TMDL generated significant concern among several parties, including the Corps and Reclamation. Concerns included both technical issues associated with EPA approach/modeling and over-arching policy issues related to attainability of state and tribal water quality standards. The meeting in Portland on September 25-26 was intended to determine if the three federal agencies could reach agreement on a path forward to address the relevant technical and policy issues.

This paper summarizes the agreements reached at the meeting and the action plan for follow-up steps.

Meeting Attendees.

The meeting was well-attended by staff and managers of the three agencies, including Reclamation officials from Boise; EPA officials from Region 10 in Portland and Seattle, and Headquarters; and Corps officials from Portland and Walla Walla Districts, Northwestern Division, ERDC, and Headquarters. See attached attendees list.

Major Points of Agreement

1. Everyone agreed it appears unlikely that full attainment of state and tribal water quality standards for water temperature is feasible throughout the study area (Columbia from the Canadian Border to the Pacific; Snake from the confluence with the Salmon

River to confluence with the Columbia), even with significant changes in dam operations and/or configuration.

2. Everyone also agreed that in spite of these likely attainment challenges, it is important for the agencies to work together diligently to a) determine the nature and extent of the temperature problems in the two rivers, and b) gain a full understanding of the practical and feasible measures available to address temperature problems.

3. The specific regulatory pathway to be pursued to address the listed temperature impairments (e.g., TMDL, or UAA, or other) is a matter to be addressed once the technical and policy issues addressed below have been more fully resolved.

4. A technical team will be formed by the three agencies. Members of this team were identified and the initial work assignment for the team was identified.*

5. A policy-level team with members from all three agencies will also be formed to review the recommendations/findings of the technical team.

6. EPA will work with the three states and appropriate tribes to gain a clear understanding of how each state and tribe will determine temperature compliance in the rivers. Before completing this effort, the Corps and Reclamation will be brought into the conversation with the states and tribes to allow for an open dialogue between federal, tribal and state agencies on how compliance will be determined. This will include discussing what operational and/or physical modifications to physical dam structures should be evaluated, and the criteria to be used by the states to determine feasibility.

7. There was extensive and fruitful discussion of modeling tools. Through that discussion, a) the Corps and Reclamation expressed interest in developing and applying 2D models to answer questions related to the impact of their dams on attaining state and tribal water quality standards for certain river reaches (Lower Snake & Grand Coulee reservoirs), and EPA supported this interest; b) EPA conveyed it's position that, for purposes of modeling "unimpaired conditions" dams should not be included in the model. However, EPA does not intend to consider dam removal as an option for addressing temperature impairments; and, c) Corps and Reclamation raised concerns about boundary conditions and model assumptions. Further technical review/discussion of EPA's model was referred to the technical committee.

* Although not discussed at length, it might also be agreeable/desirable to consider adding members to the technical team from states, tribes, or other agencies in the future. Likewise for the policy team.

8. The initial work of the technical team is to address the following questions, qualitatively, and bring their assessment, with pros and cons, to the policy team:

a. Develop a qualitative analysis of how different boundary conditions (e.g., current conditions, absence of Dworshak, absence of Canadian dams on main stem**)** could be estimated, including the potential cost and time needed to do that. Evaluate how alternative boundary conditions might influence compliance determinations and implementation.

b. Review capabilities and limitations of a 2D model of the Snake River developed by the Corps. Evaluate how this 2D model might influence compliance determinations and implementation. Develop cost and time estimates for 2D model documentation and enhancements to assess "no dams" conditions for the Snake River.

c. Review capabilities, limitations, and results of pending models of Lake Roosevelt (including PSU 2D model and potential Reclamation 2D model). Evaluate how these models might influence compliance determinations and implementation. Develop cost and time estimates for 2D model development and enhancements, including "no dam" setup.

d. Assess the feasibility, cost and potential benefits associated with a focused assessment of the Columbia River above Chief Joseph and including Lake Roosevelt.

e. Assess the need for data updates for the existing EPA model for the remainder of the Columbia River main stem from Chief Joseph to the estuary. Additionally, assess the linkage to a 2D model of the Snake River. EPA will distribute complete documentation for its existing 1D model to the Corps and Reclamation.

9. The technical team will conduct a meeting in November* to consider this work assignment and prepare their findings, if possible, for the policy team.

10. The policy team will meet again in December** to assess progress and decide on the path forward. If there is suitable progress on the technical issues listed above, the plan would be to: a) share the results in a follow-up meeting with other affected federal agencies, notably the U.S. Fish & Wildlife Service, NOAA Fisheries, and BPA, perhaps early in 2008; then c) share the collective path forward with state and tribal officials.

11. Once EPA, the Corps, and Reclamation agree on this summary of our September 25-26 meeting, it will be shared with concerned states and tribes to determine what involvement they wish to have as the federal effort goes forward.

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* This meeting occurred March 4, 2008.

** This meeting has not occurred nor been scheduled as of 3/15/2008.

List of Attendees

Corps
Bruce Duffe-Portland
Steve Juul-Walla Walla
Dave Ponganis-NWD
Mike Schneider-ERDC
Dave Shepp-HQ
Rudd Turner-NWD

Reclamation
Bryan Horsburgh
Tim Personius

EPA
Jim Carleton-HQ
Ben Cope-R10
David Croxton-R10
Mike Gearheard-R10
Denise Keehner-HQ
Amy Newman-HQ
Rick Parkin-R10
Mary Lou Soscia-R10
Tom Wall-HQ